

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
TYLER DIVISION**

THE MATHWORKS, INC.,

Plaintiff,

v.

ACCELEREYES LLC, JOHN MELONAKOS,  
GALLAGHER PRYOR, AND JAMES  
MALCOLM,

Defendants.

**CIVIL ACTION NO. 6:11-CV-354**

**JURY TRIAL DEMANDED**

**FIRST AMENDED COMPLAINT**

Plaintiff The MathWorks, Inc. (“MathWorks”), for its first amended complaint against Defendants AccelerEyes LLC (“AccelerEyes”), John Melonakos (“Melonakos”), Gallagher Pryor (“Pryor”), and James Malcolm (“Malcolm”), hereby alleges:

**PARTIES**

1. Plaintiff MathWorks is a Delaware corporation with its principal place of business at 3 Apple Hill Drive, Natick, Massachusetts 01760-2098.
2. On information and belief, Defendant AccelerEyes is a corporation organized under the laws of the State of Georgia. On information and belief, AccelerEyes’ principal place of business is located at 75 5th Street N.W., Suite 204, Atlanta, Georgia 30308. On information and belief, AccelerEyes develops and manufactures software products, including Jacket, libJacket, Jacket Mobile NDK, ArrayFire, various add-on libraries, and various add-on products. These add-on libraries include Jacket Sparse Linear Algebra (“SLA”), Jacket Double Precision Linear Algebra (“DLA”), Image Processing library, Signal Processing library, Statistics library,

and Graphics library (collectively, “Add-On Libraries”). These add-on products include Jacket MGL, Jacket HPC, Jacket JMC, and Jacket SDK (collectively, “Add-On Products”). On information and belief, AccelerEyes offers for sale, sells, copies, distributes, and otherwise markets, in this district and elsewhere in the United States, software products, including Jacket, libJacket, Jacket Mobile NDK, ArrayFire, the Add-On Products, and the Add-On Libraries.

3. On information and belief, Defendant Melonakos resides at 4199 Alaina Circle, Austell, Georgia 30106. On information and belief, Melonakos is a co-founder of AccelerEyes, a supermajority shareholder of AccelerEyes, and AccelerEyes’ Chief Executive Officer.

4. On information and belief, Defendant Pryor resides at 4226 Arnolds Mills Overpast, Douglasville, Georgia, 30135. On information and belief, Pryor is a co-founder of AccelerEyes, a supermajority shareholder of AccelerEyes, and AccelerEyes’ Chief Technology Officer and Vice President of Research.

5. On information and belief, Defendant Malcolm resides at 860 Peachtree Street, N.E., Unit 2103, Atlanta, Georgia, 30308. On information and belief, Malcolm is a co-founder of AccelerEyes, a supermajority shareholder of AccelerEyes, and AccelerEyes’ Vice President of Engineering.

6. On information and belief, Defendants Melonakos, Pryor, and Malcolm (the “Individual Defendants”) personally direct, participate in, authorize, and supervise the development, manufacture, and sale of AccelerEyes’ software products, including Jacket, libJacket, Jacket Mobile NDK, ArrayFire, the Add-On Libraries, and the Add-On Products. On information and belief, the Individual Defendants personally direct, participate in, authorize, and supervise, and have since the founding of AccelerEyes, the design, development and

implementation of AccelerEyes' software products, including the infringing Jacket, libJacket, Jacket Mobile NDK, ArrayFire, the Add-On Libraries, and the Add-On Products.

7. On information and belief, the Individual Defendants personally direct, participate in, authorize, and supervise the offer for sale, sale, copying, distribution, and marketing, in this district and elsewhere in the United States, of software products, including Jacket, libJacket, Jacket Mobile NDK, ArrayFire, the Add-On Libraries, and the Add-On Products. On information and belief, by virtue of their ownership of AccelerEyes, the Individual Defendants stand to receive personal financial benefits from AccelerEyes' sales of Jacket, libJacket, Jacket Mobile NDK, ArrayFire, the Add-On Libraries, and the Add-On Products, including enjoying personal financial benefits from sales of Jacket, libJacket, Jacket Mobile NDK, ArrayFire, the Add-On Libraries, and the Add-On Products to customers within the State of Texas and this district.

8. On information and belief, the Individual Defendants intend for AccelerEyes to be acquired by a larger company based at least in part on AccelerEyes' and the Individual Defendants' development, sales, and marketing of Jacket, libJacket, Jacket Mobile NDK, ArrayFire, the Add-On Libraries, and the Add-On Products. On information and belief, as founders, supermajority shareholders, and owners of AccelerEyes, the Individual Defendants stand to receive personal financial benefits from any acquisition of AccelerEyes intended by the Individual Defendants.

#### **JURISDICTION AND VENUE**

9. This is a civil action for copyright infringement arising under the copyright laws of the United States, Title XVII of the United States Code. Accordingly, this Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338.

10. Personal jurisdiction exists generally over Defendant AccelerEyes and the Individual Defendants because AccelerEyes and the Individual Defendants have purposely established minimum contacts with this forum as a result of business conducted within the State of Texas and within this district and specifically as a result of, at least, the Defendants' distribution networks wherein Defendants offer for sale, sell, market, distribute, and place products that infringe MathWorks' copyrights within the stream of commerce, which stream is directed at Texas and this district, and by committing the tort of copyright infringement within Texas and this district. Further, Defendants have purposefully directed activities toward the State of Texas, including the offer for sale, sale, distribution, and marketing of products that infringe MathWorks' copyrights within the State of Texas and this district.

11. Venue is proper in this district under 28 U.S.C. §§ 1391 and 1400.

#### **BACKGROUND FACTS**

12. MathWorks is a leading developer of mathematical computing software that is used by engineers and scientists worldwide to accelerate the pace of discovery, innovation, and development. Founded in 1984, MathWorks creates software for technical computing and model-based design for engineers, scientists, mathematicians, and researchers. MathWorks' core products include its MATLAB® computer software.

13. MATLAB® is a computer program that provides an environment for algorithm development, data analysis, visualization, and numeric computation. MathWorks develops and markets MATLAB® as "the language of technical computing," a proprietary, high-level computer programming language and interactive environment that enables a user to perform computationally intensive tasks faster than through the use of traditional programming languages such as C, C++, and Fortran.

14. MATLAB® is a popular software tool for engineering and scientific work used by over a million of the world's leading technical people, in over 100 countries, who work at the world's most innovative technology companies, government research labs, financial institutions, and at more than 3,500 universities. MathWorks also offers add-on toolboxes (collections of special-purpose MATLAB® functions) to extend the MATLAB® environment to solve particular classes of problems in different application areas. The toolboxes provide application-specific numerical, analysis, and graphical functions. MathWorks' Toolboxes include, among others, the Image Processing Toolbox, the Statistics Toolbox, and the Signal Processing Toolbox.

15. MATLAB® and MathWorks' Toolboxes provide engineers, scientists, mathematicians, and educators with a powerful set of tools. These products serve a broad range of tasks across a variety of industries from biotech and pharmaceutical to communications, energy production, financial services, and industrial automation. For example, MathWorks' customers have used MATLAB® to develop a tool that enables doctors to assess the depth and severity of burn injuries, allowing them to treat threatened tissue while there is still time to save it; to predict losses from potential natural disasters; to enhance performance, reduce costs, and improve manufacturing of fuel cells; to predict a breast cancer patient's clinical outcome based on the gene expression profile of the primary tumor; and to improve the safety of oil exploration by improving the ability to monitor explosions that perforate the well bore.

16. Over the years, MathWorks' products have received substantial recognition in the form of industry awards and accolades. For example, EDN, a magazine published for engineers and focused on electronic design technologies, has recognized MathWorks' products as "Top Software" products, "Hot Products," and top "Innovative" products on separate occasions.

Scientific Computing Magazine has also recognized MathWorks' products with a variety of awards over the years. Automotive Engineering International has also recognized MathWorks' products as a "Top Product." MATLAB® has also received choice awards from the readers of NASA Tech Briefs and Scientific Computing & Automation, and the editors of Microwaves & RF.

17. According to AccelerEyes' website, [www.accelereyes.com](http://www.accelereyes.com), AccelerEyes provides "MATLAB GPU Computing." On [wiki.accelereyes.com](http://wiki.accelereyes.com), AccelerEyes advertises that:

Jacket enables developers to write and run code on the GPU in the native M language used in MATLAB. Jacket accomplishes this by automatically wrapping the M language into a GPU compatible form. By simply casting input data to Jacket's GPU data structure, MATLAB functions are transformed into GPU functions. Jacket also preserves the interpretive nature of the M language by providing realtime, transparent access to the GPU compiler.

18. AccelerEyes advertises that "JACKET is a MATLAB® library for GPU computing." (<http://wiki.accelereyes.com/wiki/index.php/Category:JACKET>). In presentations, AccelerEyes has touted that "Jacket combines the speed of CUDA and the graphics of the GPU with the user friendliness of MATLAB." AccelerEyes states that:

Jacket was initially launched in 2007 as a MATLAB accelerator and has become the fastest, broadest GPU computing platform adopted widely by MATLAB programmers. In conjunction with the Jacket 1.5 release in Sep 2010, AccelerEyes began releasing LIBJACKET to enable C/C++ applications to benefit from the core technology that has heretofore been available only to MATLAB programmers.

<http://wiki.accelereyes.com/wiki/index.php?title=LIBJACKET&oldid=10710>.

19. Upon information and belief, AccelerEyes and the Individual Defendants developed Jacket, libJacket, Jacket Mobile NDK, ArrayFire, the Add-On Libraries, and the Add-On Products by copying MathWorks' MATLAB® product and associated MATLAB® Toolboxes. Upon information and belief, AccelerEyes and the Individual Defendants made

decisions about which MATLAB® and associated MATLAB® Toolbox functions to include in their products after surveying users about the MATLAB® functions they used or upon which they relied.

**COUNT I**

**COPYRIGHT INFRINGEMENT – 17 U.S.C. § 106**

20. Plaintiff incorporates by reference each of the allegations contained in the foregoing paragraphs 1-19.

21. MathWorks has registered MATLAB® in compliance with the Federal Copyright Laws. MathWorks has also registered various MATLAB® Toolboxes in compliance with the Federal Copyright Laws, including the Image Processing Toolbox, Statistics Toolbox, and the Signal Processing Toolbox. MathWorks is the owner of all right, title, and interest to the copyright registrations for MATLAB®, Image Processing Toolbox, Statistics Toolbox, and the Signal Processing Toolbox (collectively, “the Copyrighted Software”). The relevant copyright registration numbers include but are not limited to TX 1-625-488; TX 5-619-564; TX 6-290-220; TX 7-347-461; TX 7-347-459; TX 7-347-456; TX 7-347-457; and TX 7-364-764. Copies of these registrations are attached as Exhibits A-H hereto.

22. In compliance with Copyright Regulations, MathWorks filed with the Copyright Office a copyright application, the registration fee, and a deposit of the works being registered. The effective date of a copyright registration is the day on which an application, deposit, and fee have all been received in the Copyright Office. 17 U.S.C. § 410(d).

23. The Copyrighted Software are original works of authorship and comprise copyrightable subject matter under the copyright laws of the United States, 17 U.S.C. §§ 101 *et seq.* MathWorks has complied in all respects with the laws governing copyright including, for

example, marking and has secured the exclusive rights and privileges in, to, and under the copyrights in the Copyrighted Software.

24. As the owner of the Copyrighted Software, MathWorks enjoys the exclusive right to, among other things, reproduce the Copyrighted Software, prepare derivative works based upon the Copyrighted Software, and distribute copies of the Copyrighted Software. 17 U.S.C. §§ 101, 106.

25. The AccelerEyes software, including Jacket, libJacket, Jacket Mobile NDK, ArrayFire, the Add-On Libraries, and the Add-On Products, being offered for sale, sold, copied, and distributed by AccelerEyes and the Individual Defendants (“the Accused Software”) infringe MathWorks’ copyrights in the Copyrighted Software.

26. At all times relevant hereto, AccelerEyes and the Individual Defendants have been aware or should have been aware of the existence of MathWorks’ copyrights in the Copyrighted Software and, therefore, AccelerEyes and the Individual Defendants are willful infringers of MathWorks’ copyrights.

27. The infringement of MathWorks’ copyrights by AccelerEyes and the Individual Defendants will cause imminent harm to MathWorks’ reputation and goodwill unless restrained by this Court. AccelerEyes’ and the Individual Defendants’ infringement will irreparably harm MathWorks’ business and deprive it of a competitive advantage. MathWorks has no adequate remedy at law for AccelerEyes’ and the Individual Defendants’ infringement. MathWorks has a substantial likelihood of success on the merits with respect to copyright infringement and the injury faced by MathWorks substantially outweighs the injury that would be sustained by AccelerEyes and/or the Individual Defendants as a result of granting injunctive relief.

Furthermore, granting injunctive relief on the basis of AccelerEyes' and the Individual Defendants' copyright infringement would not adversely affect public policy or public interest.

**JURY DEMAND**

28. MathWorks requests a trial by jury on all issues so triable.

**PRAAYER FOR RELIEF**

WHEREFORE, Plaintiff MathWorks prays that the Court grant the following relief:

1. Declare that each of the Defendants has infringed MathWorks' copyrights in the Copyrighted Software.

2. Pursuant to 17 U.S.C. § 502, permanently enjoin each of the Defendants, their officers, agents, servants, employees and attorneys, and all persons in active concert or participation with them, from infringing the Copyrighted Software in any manner, and from copying, preparing derivative works, selling, distributing, or otherwise generating income from the Copyrighted Software or any software that has been derived in whole or in part from MathWorks' Copyrighted Software, including without limitation the Accused Software.

3. Pursuant to 17 U.S.C. § 503, order the destruction of Defendants' infringing software, including without limitation the Accused Software and all copies and back-ups thereof.

4. Order each of the Defendants to stop marketing and selling the Accused Software.

5. Pursuant to 17 U.S.C. § 504, order an accounting of all gains, profits, and advantages derived by each of the Defendants from their copyright infringement, and order each of the Defendants to pay to MathWorks the actual damages that MathWorks has sustained and each of the Defendants' profits attributable to their copyright infringement or statutory damages, including treble damages for willful infringement.

6. Enter judgment against each of the Defendants in an amount equal to MathWorks' actual damages as determined by the Court.
7. Increase such judgment by the amount each of the Defendants has been unjustly enriched by virtue of its misconduct.
8. Pursuant to 17 U.S.C. § 505, order each of the Defendants to pay MathWorks' costs and reasonable attorneys' fees.
9. Grant such other and further relief as this Court may deem just and appropriate.

February 16, 2012

Respectfully submitted,

*/s/ Krista S. Schwartz*

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that the foregoing document was filed via the Court's CM/ECF System on February 16, 2012 and was served upon all counsel of record via the Court's CM/ECF System.

/s/ Krista S. Schwartz  
Krista S. Schwartz

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